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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,823	04/03/2002	Nicholas D Hutchins	2520/3	5596

7590

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EXAMINER

NEGRON, ISMAEL

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 07/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/089,823	HUTCHINS ET AL.	
	Examiner	Art Unit	
	Ismael Negron	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30 is/are allowed.
- 6) ☒ Claim(s) 1-29 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 April 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Title

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: **Modules for Elongated Lighting System.**

Abstract

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

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- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

2. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the electrically inactive modules (claims 27 and 28) and the smart module (claim 30) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claim 31 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 31 is indefinite as it is not clear what are the meets and bounds of the limitation "smart module".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-5, and 7-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Mistopoulos et al. (U.S. Pat. No. 6,113,248).

Mistopoulos et al. discloses an illumination device having :

- **a module of discrete length**, Figure 1, reference number 10;
- **the module having a plurality of electronic devices**, Figure 2, reference numbers 17 and 24;
- **an elongated support for supporting the electronic devices**, Figure 2, reference number 14;

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- **a pair of electrical conductors connect d to the electronic devices**, Figure 2, reference number 15a and 15b;
- **the electrical conductors having a length not exceeding that of the module**, column 4, lines 11-13;
- **the module being molded integrally with the electronic devices, elongated support and electrical conductors**, column 3, lines 45-54;
- **the module being molded of at least one of a transparent, opaque and semi-transparent plastic material**, inherent;
- **the electronic devices being light emitting diodes (LED**, Figure 2, reference number 17;
- **the electronic devices being selected from LED, light-emitting plastic compositions, polymers or organic substances, sensors, lighting systems, piezoelectric devices, incandescent bulbs, laser diodes and electro-luminescent devices**, column 3, line 48;
- **the electrical conductors having a length less than that of the module**, column 4, lines 16 and 17;
- **the electrical conductors are adapted to be connected to an external power source**, as shown in Figure 13;
- **the module having a non-planar shape**, as shown in Figures 3 and 8;

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- **at least one LED being laterally oriented from the longitudinal plane of the module, Figure 2, reference number 17;**
- **the elongated support being metallic, column 4, lines 47-56;**
- **the elongated support being a heat sink, inherent;**
- **the module having a continuous electrical circuit through its length, inherent; and**
- **an electrically passive module, Figures 14 and 15.**

6. Claim 28 is rejected under 35 U.S.C. 102(b) as being anticipated by Sears et al. (U.S. pat. No. 5,222,799).

Sears et al. discloses a module having no electrical function and including a reflector and being U-shaped (Figure 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6 and 29 rejected under 35 U.S.C. 103(a) as being unpatentable over Mistopoulos et al. (U.S. Pat. No. 6,113,248).

Mistopoulos et al. discloses an illumination device having :

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- **a module of discrete length**, Figure 1, reference number 10;
- **the module having a plurality of electronic devices**, Figure 2, reference numbers 17 and 24;
- **an elongated support for supporting the electronic devices**, Figure 2, reference number 14;
- **a pair of electrical conductors connected to the electronic devices**, Figure 2, reference number 15a and 15b;
- **the electrical conductors having a length not exceeding that of the module**, column 4, lines 11-13;
- **the module being molded integrally with the electronic devices, elongated support and electrical conductors**, column 3, lines 45-54;
- **the module being molded of at least one of a transparent, opaque and semi-transparent plastic material**, inherent; and
- **the electronic devices being light emitting diodes (LED)**, Figure 2, reference number 17.

Mistopoulos et al. discloses all the limitations of the claims, except the power source being an internal power source, and including piezoelectric devices or solar panels, and batteries or capacitors.

The Examiner takes Official Notice that the use of solar panels in combination with batteries is old and well known in the art. One of ordinary skill in the art would have been motivated to add such solar panel/ battery combination to the illumination device

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of Mistopoulos et al. to obtain a portable illumination device with a long lasting power source independent from external connections. See Section 9 of the instant Office Action.

Relevant Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. **Butler et al.** (U.S. Pat. No. 3,161,797), **Solow** (U.S. Pat. No. 4,761,720), **Naruke et al.** (U.S. Pat. No. 5,193,895), **Brookman** (U.S. Pat. No. 5,337,225), **Guritz** (U.S. Pat. No. 5,375,044) and **Cassidy et al.** (U.S. Pat. No. 5,661,374) disclose a plurality of modular illumination devices having LED and electro-luminescent devices as light sources.

9. **Baba et al.** (U.S. Pat. No. 4,486,820), **Wade** (U.S. Pat. No. 5,370,082), **McGee** (U.S. Pat. No. 5,595,441) and **Cathel** (U.S. Pat. No. 6,299,325) disclose a plurality of illumination devices having LED light sources and solar panels /rechargeable batteries power sources.

Allowable Subject Matter

10. Claim 30 is allowed.

11. Claim 31 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

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12. The following is a statement of reasons for the indication of allowable subject matter:

Applicant teaches a modular LED lighting system including a plurality of LED disposed on an elongated support, and a power source having an embedded magnetic core and coiled wire. Inducing a voltage on the core/coil combination energizes the module. All the electrical circuit components are integrally molded into discrete modules made of a plastic material.

No prior art was found teaching individually, or suggesting in combination, all of the features of the applicants' invention, specifically an LED module energized by inducing a voltage on an integrally molded core/coil combination.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negrón whose telephone number is (703) 308-6086. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea, can be reached on (703) 305-4939. The facsimile machine number for the Art Group is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.


ALAN CARIASO
PRIMARY EXAMINER

Inr

June 22, 2003